



Getting Started with the NOAA SBIR Program: Submitting a Research Subtopic

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Small Business Innovation Research

The Federal SBIR Program is a highly competitive program that encourages domestic small business to engage with federal government in developing products/services that have potential for commercialization while meeting agency mission needs.



SBIR Mission:

To support scientific excellence and technological innovation through the investment of Federal research funds in critical American priorities to build a strong national economy... one small business at a time



SBIR Program Goals

- Stimulate technological **innovation**.
- Meet **Federal research and development needs**.
- Foster and encourage participation in innovation and entrepreneurship by **socially and economically disadvantaged persons**.
- Increase private-sector **commercialization** of innovations derived from Federal research and development funding.



Previous SBIR federal funding recipients:



SBIR · STTR
America's Seed Fund

<https://www.sbir.gov/featured-success-stories>



The SBIR Program

- SBIR was created by Roland Tibbetts at the National Science Foundation and signed as a Federal-wide program in 1982 by Ronald Reagan.
- SBIR programs have awarded over \$43 billion to research-intensive American small businesses.
- The 450,000 engineers and scientists involved are one of the largest STEM talent concentrations in the world.



The SBIR Program

- A set-aside program for small business to engage in Federal R&D with potential for commercialization.
- Starting in 2017 and beyond*, set-aside is 3.2% of the extramural research budget for all agencies with a budget greater than \$100M per year.

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
2.5%	2.6%	2.7%	2.8%	2.9%	3.0%	3.2%



**Federal SBIR Program is legislatively authorized until 2022*

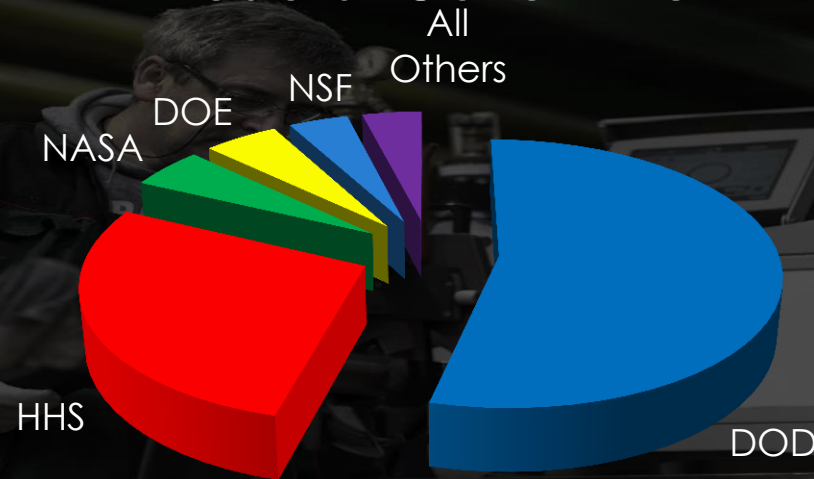


Participating Agencies

- Dept. of Agriculture (USDA)
- **Dept. of Commerce (DoC)**
- Dept. of Defense (DoD)
- Dept. of Education (ED)
- Dept. of Energy (DOE)
- Dept. of Health & Human Services (HHS)
- Dept. of Homeland Security (DHS)
- Dept. of Transportation (DOT)
- Environmental Protection Agency (EPA)
- National Aeronautics and Space Administration (NASA)
- National Science Foundation (NSF)



SBIR Funding Across Federal Government



SBIR Agency Differences

- Number and timing of solicitations
- Topic areas (Broad v. Focused)
- Type of award (Contract v. Grant)
- Dollar amount of award (Phase I and II)
- Proposal preparation instructions
- Proposal review process



SBIR Program Eligibility

- Small Business Concern must be organized as For-profit
- American-owned and independently operated
- Work must be done in the U.S.
- Principal Investigator employed by small business
- Company size limited to 500 employees



A composite image representing NOAA's work. It features a satellite in space, a research ship on the ocean, a NOAA aircraft in flight, and a sea turtle swimming underwater. The NOAA logo and the text "NOAA SCIENCE. SERVICE. STEWARDSHIP." are overlaid on the image.

National Oceanic and Atmospheric Administration



NOAA SBIR Program

Seeking innovative products and services
Must benefit NOAA's mission
Commercial potential



NOAA SBIR Program

Awards	Firm-Fixed-Price Contracts*
Solicitation per fiscal year	One
Released	mid-October
Proposals due	mid-January
Available	FedBizOpps (fbo.gov)
Typical Phase I Awards	15 to 25
Typical Phase II Awards	10 to 15
SBIR Funding	~\$6-7M each year

**in the process of transitioning to Grants or Cooperative Agreements in FY19*

The Three Phases of SBIR

Phase I

Feasibility Study

\$120K

6 months

The Three Phases of SBIR

Phase II

Full Research and Development

\$400K

2 years

*Note: The company retains rights to the developed technology.

The Three Phases of SBIR

Phase III

Commercialization

Subsequent investment

Non-SBIR Federal funds or private sector funds

NOAA SBIR Topic Areas

NOAA Strategic Research Guidance Memorandum

- Integrated Earth System Processes & Predictions
- Environmental Observations
 - Observing Systems Optimization
 - Data Science Advancements
- Decision Science, Risk Assessment & Risk Communication
- Integrated Water Prediction
- Arctic Research
- *SBIR Technology Transfer

NOAA SBIR Peer Review

Five Evaluation Criteria

Technical Approach

Fulfillment of Subtopic Requirements

Level of Innovation

Commercial Potential

Qualifications of Team

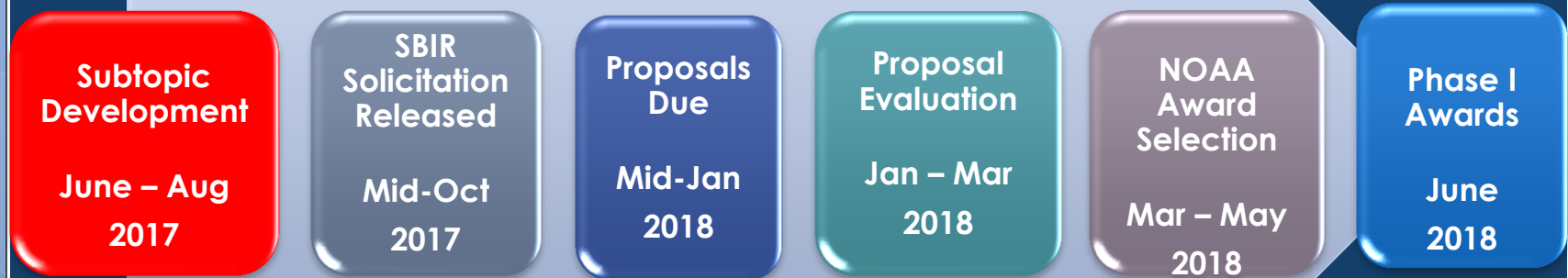
Ratings

Outstanding, Good, Acceptable, Marginal, Unacceptable

NOAA SBIR Schedule



NOAA SBIR Schedule



Subtopic Development (Jun-Aug)

First things first. Eligibility for submitting a Subtopic

- Must be a NOAA Federal Employee
- Serve as the Technical Point of Contact (TPOC) for project. This includes serving as the lead coordinator of technical reviewers of proposals within your subtopic
- Commitment applies to Phase I and Phase II (if selected for follow-on funding to continue the R&D)

Subtopic Development (Jun-Aug)

What is an SBIR research subtopic?

- Subtopics are “problem statements” that you may have for your program or mission area
 - Examples include: “We need a more accurate way to count fish in the Mississippi delta.”
- Cannot be specific or prescriptive
 - Using the example above, we won’t tell the vendors how they will count fish such as prescribing them to use sonar or underwater cameras. Instead, we allow them to find innovative ways to do so.

Subtopic Development (Jun-Aug)

How do I submit one?

- The NOAA SBIR Subtopic form was distributed via the NOAA Research Council and also through your AA/DAA.
- It is available via the SBIR intranet page (use your NOAA Google credentials) here: <http://techpartnerships.noaa.gov/SBIR.aspx>
- All submissions are due by ~~5PM EDT, August 15th~~

The deadline has been extended to 5PM EDT, August 29th

What's Next?

All subtopics are compiled and the following subtopic selection methodology is used to rank them:

1. **SBIR Program Goals**
 - Will the subtopic highly encourage small business participation, thus providing stimulus to the economy thru commercialization?
2. **Commercialization Potential**
 - Utilize market research (ex. sbir.gov, previous RFI, etc.)
3. **Innovation**
 - Is the subtopic challenging vendors to be innovative in their solution? Or is it merely answering a program or lab need?
4. **Specific vs Broad**
 - Is the project too specific, which potentially limits industry participation? Or is it broad enough to meet industry needs?

What's next?

- Subtopics with potential for high participation by small businesses and have the most commercial potential will be selected for inclusion in the FY18 SBIR Solicitation (scheduled to be published in October 2017).
- The number of subtopics selected depends on the FY18 budget. At this point, that number is still to be determined.

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TECHNOLOGY PARTNERSHIPS OFFICE

Promoting Partnership & Commercialization of NOAA Technology and Innovations

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